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09/928,717	08/09/2001	Richard Fischbeck	00-106	6856

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EXAMINER

A, PHI DIEU TRAN

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/928,717

Applicant(s)

FISCHBECK, RICHARD

Examiner

Phi D A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-10,15,16 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) 2,6,7 and 25-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,8-10,15,16 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 line 2 “ a virtual strut” is improper. Should it be “ the virtual strut”?

Claim 8 “ a virtual strut ....hub elements” is redundant as this part of the claim limitations is already in the independent claim.

Claim 24 line 5 “ length. and “ is improper English.

***Drawings***

3. New corrected drawings are required in this application because figures 15-16 do not conform to the practice of formal drawing. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

***Election/Restrictions***

1. Applicant's request for reconsideration of claims 2, 6-7, 25-27 in Paper No. 10 is acknowledged. However, as applicant elected specie I to figure 5, the specie I to figure 5

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appears to read on claims 1, 8-10, 14-16 only as previously stated and newly added claim 24 also reads on figure 5. The specie I to figure 5 is to a conical structural, not a right circular cone as in figure 6. Thus, claims 2, 6-7, 25-27 are withdrawn from further consideration as to a non-elected specie to figure 6 as stated in the previously office action.

Newly submitted claims 28-31 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims are to the method of constructing a geodesic structure with steps not required in the article claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28-31 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Also, applicant's attempt to modify the claims to include the non-elected figure 6 is noted. The claims 2, 6-7, 25-27 to figure 6, however, still are not considered per MPEP 821.03 above.

***Claims 1-2, 6-10, 15-16, 24-31 are pending. Claims 2, 6-7, and 25-31 are restricted and withdrawn from consideration as stated above.***

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1, 8, 9, 15, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Jaeger et al (6098347).

Jaeger et al (figures 2, 19, 20) shows a geodesic structure (39) having a plurality of hub elements (1) having a vertex (18) and a hub base (the bottom at 20) at a second end that is opposite the first end, an angular deficit ( $\alpha$  formed by angular frame 20), the hub elements (inherently is able, figure 20) to be randomly arranged adjacent to one another so as to form the geodesic structure, the structure is triangulated by a network of virtual struts (figures 20, 22), each virtual strut having a strut length, the virtual strut extending as a straight line between any two adjacent vertexes of the hub element ( the virtual line connecting the vertexes at 18), the virtual strut is formed along a single plane curvature that extends between any two adjacent hub element (the plane that connects the apexes), the structure being a semi-spherical dome (figure 19), the hub being fabricated of sheet material from sheet material from the group consisting of metal (3), the strut length of the virtual struts being a variable strut length, wherein the strut length of a first strut between a first hub element and a second hub element is a first length and the strut length of a second strut between the first hub and the third hub element is a second length that is different from the first length, the structure is self adjusted by means of the strut length (the strut length variations shown in figures 11-17 wherein the lengths are effected by the spacing therebetween).

4. Claims 1, 8-10, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Chamberlain (4270320).

Chamberlain shows a geodesic structure having a plurality of hub elements (26), each hub element having a vertex ( figure 3, at 66) at a first end and a hub base ( the bottom at 34) at a

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second end that opposite the first end, an angular deficit (Alpha formed by the curvature of the hub on the interior), the hub elements are randomly arranged adjacent to one another so as to form the geodesic structure, the structure triangulated by a network of virtual struts (inherently so as the virtual struts can connect the apexes as straight lines), any one of the virtual struts of the network of virtual struts having a strut length and extending as a straight line between the vertexes of any two adjacent hub element (inherently capable of doing so), the virtual strut is formed along a single plane curvature that extends between said any two adjacent hub elements (inherently capable of doing so), the structure being a sphere ( col 3 lines 18-19, geometrically a perfect sphere), a virtual strut having a strut length, the virtual strut extending as a straight line between any two adjacent vertexes of the hub element ( the virtual line connecting the vertexes at 66), a semi-spherical dome ( figure 1), the hub being fabricated of sheet material from the group consisting of metal, the hub elements being arranged in an overlapping fashion (figure 1) so as to provide a closed surface.

### ***Response to Arguments***

1. Applicant's arguments filed 7/29/03 to claims 1, 8-10, 15-16 have been fully considered but they are not persuasive.

With respect to applicant's statements that Jaeger et al's structure cannot form the claimed structure as applicant's structure is frameless while Jaeger et al's structure is not, examiner respectfully disagrees. Jaeger et al's shows all the claimed limitations. Jaeger et al's hubs include all of applicant's claimed features; the hubs inherently can form applicant's structures as claimed. Also, examiner fails to notice where applicant claims a "frameless

structure”. Perhaps, applicant would like to put the language in the claims for further consideration later on. The argument is thus moot.

With respect to applicant’s argument to Jaeger et al “ a cone”, the definition of a cone in Webster Collegiate Dictionary Tenth Edition ( a solid bounded by a circular or other closed plane base and the surface formed by line segments joining every point of the boundary of the base to a common vertex) reads on Jaeger et al’s cone. The argument is thus moot.

With respect to applicant’s argument that Chamberlain does not show a vertex, examiner respectfully disagrees. As shown in figures 4-5, the vertex is clearly at the center. Chamberlain’s figures also show triangulation of the virtual struts as claimed. The argument is thus moot.

### ***Conclusion***

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different geodesic structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 703-306-9136. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Phi Dieu Tran A  
December 8, 2003

PA

LANNA MAI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

